

Operating expenses per subscriber have fallen by 47 percent in real terms from 1989 to 1993.<sup>14</sup> (See Appendix H) In addition, capital investment per cellular subscriber declined from \$1,816 to \$978 between June 1988 and June 1993.<sup>15</sup> This decline in operating and capital costs is expected in a young, growing industry that is gaining operational experience and possibly exploiting scale economies. Unfortunately, this decline in costs has not been accompanied by a commensurate decline in rates. In California the rate of growth has been on the average 34 percent for the major markets.

1. Method For Pricing Analysis

To examine pricing trends in the cellular market, the CPUC analyzed data on all pricing plans offered by the facilities based-carriers in the top five MSAs and two small RSAs for each year from 1989 through 1993.<sup>16</sup>

Generally, California cellular carriers offer a number of retail plans that differ

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<sup>14</sup> For the remainder of this petition we will repeat prices in nominal terms for two reasons: (1) we are uncertain which inflation rate is appropriate, and (2) we expect productivity to be increasing, as it has been in other telecommunications industries. In most other telecommunications markets, increases in productivity and competition have led to real price reductions. For example, the telecommunications Consumer Price Index ("CPI") has increased by 4.6 percent, while the general CPI has increased by 14.2 percent.

<sup>15</sup> Cellular Telephone Industry Association, Mid-Year Data Survey, October, 1993, as cited in Attachment 3, footnote 4 of Cellular Service, Inc.'s Opening Comments in the CPUC's I. 93-12-007.

<sup>16</sup> The areas studied are Los Angeles MSA, San Francisco-San Jose-Oakland MSA, Sacramento MSA, San Diego MSA, Santa Barbara MSA, Fresno MSA, California 2 RSA, and California 7 RSA.

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Carriers such as AirTouch, LACTC and US West, claim that they reduced rates following adoption of the CPUC's Rate Band Guidelines. The CPUC observes that such reductions were essentially temporary promotional inducements. As noted by Cellular Services, Inc. ("CSI") in the CPUC's ongoing investigation, AirTouch claims that prices were cut by a number of carriers in 15 separate filings under the 1993 Rate Band Guidelines; however, by March 1994 only two remained in effect. Similarly, LACTC asserts that it filed 34 price-cutting tariff filings to demonstrate increased rate reduction activity, but CSI maintains that only five of the filings actually reduced rates. Of 21 LACTC filings made under temporary tariff authority, only five involved rate reductions, and these were of a temporary nature. In addition, US West's wholesale two-year contract involves a cash-back program which is now the subject of an unfair business practices complaint by Utility Consumers Action Network (a California consumer advocate) pending before the CPUC. All of the plans require long-term commitments enforced by high termination penalties for changing service.

**b. Duopolists' Basic Plan Rates**

When cellular carriers first offered service, the majority of subscribers were sold cellular service on the basic plan. The basic plan is generally less restrictive than contract plans established in later years. As other plans have been introduced to a price-differentiated market, the basic plans' use has declined. In 1989, 72 percent of California cellular consumers in major markets were on the basic plan,

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while in 1993 only 37 percent were on the basic plan.<sup>22</sup> Among small cellular markets studied by the Cellular Carriers Association of California, over 80 percent of subscribers in 1993 were on basic service plans.<sup>23</sup>

As shown in Appendix I, rates for basic plans for retail tariffs are nearly identical in Los Angeles and Santa Barbara, vary by less than 7 percent in San Francisco-Oakland-San Jose, San Diego, Fresno, RSA 7 and RSA 2, and vary by more than 10 percent only in Sacramento. Retail basic rates have fallen by less than 4 percent in nominal terms in California markets from 1989 to 1993. In Los Angeles, Sacramento and Santa Barbara rates have not fallen at all. In San Diego, San Francisco, Fresno, and RSA 2 basic retail rates have fallen by less than 4 percent in nominal terms. In RSA 7, due to the entry into the market in 1991 of a second carrier with higher rates than the incumbent carrier, average basic rates actually increased 1.5 to 5 percent during the 1989 to 1993 time frame.

In the Los Angeles market the facilities-based duopolists charge identical basic rates for all levels of use. The nominal rates have not fallen at all during the study horizon, from 1989 to 1993.

In the San Francisco-Oakland-San Jose MSA, basic rates offered by the facilities based carriers have only recently begun to diverge. GTE Mobilnet's reported nominal basic rates have not changed during 1989 to 1993, while

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<sup>22</sup>These percentages represent the share of customers who were on basic plans or their equivalents in Los Angeles, the San Francisco Bay Area, Fresno, Santa Barbara, San Diego, and Sacramento.

<sup>23</sup>Comments of Cellular Carriers Association of California in I.93-12-007.

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BACTC's nominal rates, both retail and wholesale, have declined 3 percent to 7 percent, with reductions occurring mainly in 1991 and 1993. These two carriers' retail rates were identical in 1989. Although their wholesale rates differed by 7 percent already in 1993. Since BACTC's reported rate reductions in 1993, retail rates differ on average by 6 percent.

The Sacramento market is an exception to the pattern of similar basic rates; rates in this market differ by 14 percent. This exception can be explained by the regulatory process. In 1988 both Sacramento carriers, Sacramento Cellular Telephone Company (SCTC) and Sacramento Valley Limited Partnership (SVLP), withdrew applications for identical rate increases of 50 percent for access charges, 40 percent for peak usage and 67 percent for off-peak usage. In 1989 SCTC received approval for a more modest rate increase. The CPUC is currently reviewing an SVLP application to raise rates to the same level as SCTC.

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### 3. Discount Plans

Discount plans offer modest rate relief to some consumers. We found that for most classes of customers in most urban markets the best rates offered through discount plans were lower than those offered by the basic rate. However, these rate reductions must be considered in the context of the difficult-to-quantify costs to consumers in terms of reduced flexibility, risk of termination fees and foregone access to emerging technologies. The analysis we undertook was unable to determine whether rates statewide went down as a result of the increased use of discount plans.<sup>24</sup> However, we did find that (1) in some California markets reported discount rates for low volume users are not lower than basic rates; (2) in most California markets the best available discount rate tracks very closely; and (3) carriers are anxious to sign consumers onto long term contracts, in part to keep them from changing to emerging technologies.

In California's largest and most expensive cellular market, Los Angeles, contract plans offer no rate relief to low use customers, according to carriers' reports. The best available reported rate for the Los Angeles 60 minute user is the duopolists' basic plan rate of \$1.16 per minute. Medium users can find 10 percent discounts. High volume users, represented in our study by 480 minutes of use, are receiving by far the greatest discounts, 18 percent over basic rates. In Los

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<sup>24</sup> To make any claim on the effect of discount plans on rates, the study would have to be based on a random sample of customer bills from California's major markets. In addition to usage patterns, this analysis would have to take into account the costs of any restrictions, such as term contracts, and the value of benefits, such as discounts on phones.

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Angeles discount plans appear to be structured to encourage greater cellular phone use.

**Los Angeles Cellular Telephone Company - Best Rates**

Minutes of Use	60	120	480
1989	1.16	0.79	0.51
1993	1.16	0.71	0.42

**Los Angeles SMSA - Best Rates**

Minutes of Use	60	120	480
1989	1.16	0.79	0.51
1993	1.16	0.71	0.42

Source: Carrier responses to CPUC and tariffs filed with the CPUC

While basic rates in San Francisco-Oakland-San Jose have begun to diverge, the best rate has remained close. The best blended rates for GTE and BACTC for low and medium users are within \$0.001 per minute of each other.

**Rate Comparisons - San Francisco MSA**

Minutes of Use	60	120	480
Basic Plan			
BACTC	1.07	0.73	0.48
GTE	1.15	0.78	0.49
Best Rate			
BACTC	1.03	0.70	0.45
GTE	1.03	0.70	0.38

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percentage of low use cell sectors declined to    percent, while during the same time BACTC almost doubled its total number of cell sectors. Similar to the Los Angeles MSA, in the San Francisco MSA,    percent of cell sectors are underutilized, with a capacity utilization rate of less than 80 percent.

These numbers indicate that GTE and BACTC have had widely differing available capacities in the last four years. GTE has maintained unused capacity in excess of 50 percent during the last four years, while BACTC has operated with a relatively low available capacity during these four years. Basic economic principles dictate that when excess capacity exists, prices in a competitive market should drop. Price comparisons between GTE and BACTC do not conform to this principle.

If prices were further reduced below the level associated with maximum capacity demand, as in the case of BACTC, then demand could be overstimulated beyond the available supply of calling capacity. To avoid service rationing or risk of service interruptions, it would be expected that BACTC would expand at an even higher rate. If GTE responded to competitive market conditions, it too would reduce prices to stimulate demand and use the relatively large available capacity it maintains.

Moreover, on a national basis, the national average density of systems, measured by subscribers per cell site, rose from 372 in December 1985 to 962 in

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June 1992.<sup>42</sup> This increasing density does not indicate that capacity was constrained or that potential demand fully served through this period. Instead, these data indicate that additional customers could have been added to cellular systems had prices been lower. Accordingly, excess earnings cannot be explained away by spectrum scarcity or avoidance of service rationing.

The CPUC submits that the proliferation of "discount" plans, including volume discounts, is additional evidence that the carriers are not using their allocated spectrum to maximum capacity. Putting aside the question of whether discount plans truly provide discounts, it is obvious that the carriers are actively seeking to increase usage of existing spectrum capacity.

### 3. Spectrum Value

The high earnings of cellular carriers cannot be justified by virtue of the costs incurred for a FCC cellular license franchise. The CPUC concludes that the FCC license value, particularly for the larger California cellular markets, cannot be attributed merely to inherent scarcity of spectrum. The FCC license conveys the exclusive right to utilize particular frequencies of spectrum to sell cellular telecommunications services in a prescribed area. The license has a value to market traders at a level approximating the discounted present value of the rents flowing from entering the restricted market. The fact that cellular license values

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<sup>42</sup>National Telecommunications Industry Association, U.S. Spectrum Management Policy, 1991, Appendix D-6, note 17. As quoted in Congressional Budget Office, Auctioning Radio Spectrum Licenses, March 1992, p. 37.



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years.<sup>32</sup> The second carrier in Los Angeles, Los Angeles SMSA , earned 37.9 percent annually on average over the same period. Bay Area Cellular Telephone Company in the San Francisco MSA had earnings that ranged from 31.1 percent in 1992 to 49.5 percent in 1993, with an annual average of 43.2 percent for the five years. AirTouch Communications in San Diego has earned an average of 28.3 percent per year for the last five years. These returns occurred during the worst recession in recent California history.

Other studies support our findings that high returns are the result of undue market power. Based on operating cost data provided by the Congressional Budget Office,<sup>33</sup> the fixed cost of establishing a cellular system at current technology is estimated at \$10 per person per month.<sup>34</sup> The variable operating cost of providing cellular service to a subscriber is \$10 a month. Marketing cost is estimated at \$300 per new customer. The lowest monthly customer bill for a subscriber who uses 120 minutes per month, considered average, for the Los Angeles and San Francisco MSAs combined, is about \$95.<sup>35</sup> Based on these cost estimates, the cellular carrier would earn \$75 in operating profit for each new customer.

A similar study conducted for the FCC by Kwerel & Williams in 1992 also

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<sup>32</sup> See Appendix F.

<sup>33</sup> Congressional Budget Office, Auctioning Radio Spectrum Licenses, March 1992.

<sup>34</sup> The \$10 is monthly fixed cost amortized over 10 years at 10 percent.

<sup>35</sup> Assumed at 80 percent peak and 20 percent off-peak use.

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because it gives the holder some control over its market.

It is necessary to understand how the bidder would determine the price or the recipient would determine the value of the FCC license being acquired. In either case, one would calculate the earnings from the business which can be generated under the monopoly condition. These earnings would be greater than...under the competitive market structure and...associated solely with the ownership of the FCC license.<sup>47</sup>

Assuming that it is proper to impute spectrum value into earnings, McCaw disputes claims that cellular carriers' earnings are excessive, Mc Caw presents pro forma earnings which purport to show that California cellular carriers' pre-tax rates of return would be below 25 percent if the investment base were increased to include a valuation for cellular spectrum at levels shown in its hypothetical scenarios. The CPUC finds McCaw's hypothetical earnings calculations to be based on a number of unproven, questionable assumptions that fail to show that excess earnings are not primarily attributable to market power and to spectrum scarcity.

One of the premises assumed in McCaw's calculations is that the cost paid to acquire SMR spectrum provides an equivalent measure of "uncontaminated" cellular license value free of excess profits due to market power. McCaw derives a value for SMR spectrum inferred from the acquisition by MCI of a 17 percent interest in Nextel, assuming this is a correct proxy for "uncontaminated" cellular spectrum value. However, before meaningful conclusions can be drawn regarding

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<sup>47</sup>"Declaration of Arthur A. Schoenwald in Opposition to Defendant's Motion for Summary Judgement and Adjudication of Issues," in Los Angeles Cellular Telephone Company vs. California State Board of Equalization, et. al., No. 509737 Superior Court, Sacramento, California.

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"uncontaminated" spectrum value based on pro forma cellular rates of return adjusted for SMR proxy spectrum values, a much more involved analysis of the factors underlying cellular spectrum value would be required. The difficulty in quantifying a proper value for cellular spectrum and the impetus not to undertake such a resource-intensive study is one of the reasons the CPUC rejects cost-of-service regulation as a viable option for cellular carriers.

Moreover, even if the prices paid for SMR spectrum were assumed to constitute a correct reference point for "uncontaminated" cellular spectrum, it is not clear that McCaw's representation of a value of \$42 per POP is necessarily ascribable only to SMR spectrum, as discussed earlier. Without further analysis of the terms and conditions of the MCI transaction, the CPUC cannot confirm whether there may be other intangible strategic benefits implied in the value paid by MCI for its ownership interest. For example, while McCaw states that MCI paid no control premium with only a 17 percent interest, MCI may have expected to realize some strategic advantage relative to later investors and incorporated this into its payment premium.

McCaw's adjustment of the SMR value of \$42 per POP up to \$100 per POP for the equivalent cellular spectrum is likewise questionable. McCaw bases this adjustment on the premise Nextel typically holds less than half the bandwidth of a cellular carrier. Yet, as discussed previously, the CPUC has concluded that control of a certain bandwidth frequency is not necessarily an accurate criterion for defining a carrier's market dominance. Many factors affect the price per POP

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**Appendix I**  
**Rate Comparisons and Trends**

## Appendix I

### Rate Comparisons And Trends

**Los Angeles MSA  
LACTC vs. LASMSA**

#### **Difference in Basic Rate (LACTC – LASMSA)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989	0.000	0.000	0.000	0.003	0.003	0.003
1990	0.000	0.000	0.000	0.003	0.003	0.003
1991	0.000	0.000	0.000	0.003	0.003	0.003
1992	0.000	0.000	0.000	0.003	0.003	0.003
1993	0.000	0.000	0.000	0.003	0.003	0.003
<b>%</b>						
1989	0.0%	0.0%	0.0%	0.4%	0.5%	0.8%
1990	0.0%	0.0%	0.0%	0.4%	0.5%	0.8%
1991	0.0%	0.0%	0.0%	0.4%	0.5%	0.8%
1992	0.0%	0.0%	0.0%	0.4%	0.5%	0.8%
1993	0.0%	0.0%	0.0%	0.4%	0.5%	0.8%

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	1.164	0.789	0.508	0.912	0.625	0.410
1990	1.164	0.789	0.508	0.912	0.625	0.410
1991	1.164	0.789	0.508	0.912	0.625	0.410
1992	1.164	0.789	0.508	0.912	0.625	0.410
1993	1.164	0.789	0.508	0.912	0.625	0.410
<b>Change;</b>						
1989 – 1993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	1.164	0.789	0.508	0.912	0.625	0.410
1990	1.104	0.749	0.482	0.865	0.593	0.389
1991	1.060	0.718	0.462	0.830	0.569	0.373
1992	1.029	0.697	0.449	0.806	0.553	0.363
1993	0.999	0.677	0.436	0.783	0.537	0.352
<b>Change;</b>						
1989 – 1993	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%

## Appendix I

### Rate Comparisons And Trends

**S.F. Bay Area MSA  
BACTC vs. GTE Mobilnet LP**

#### **Difference in Basic Rate (BACTC – GTE)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989	0.000	0.000	-0.000	-0.053	-0.035	-0.021
1990	0.000	0.000	-0.000	-0.053	-0.035	-0.021
1991	0.000	-0.021	-0.016	-0.053	-0.048	-0.030
1992	0.000	-0.021	-0.016	-0.053	-0.048	-0.030
1993	-0.084	-0.042	-0.016	-0.106	-0.061	-0.030
<b>%</b>						
1989	0.0%	0.0%	-0.0%	-6.7%	-6.3%	-5.4%
1990	0.0%	0.0%	-0.0%	-6.8%	-6.3%	-5.5%
1991	0.0%	-2.8%	-3.3%	-6.8%	-8.8%	-8.3%
1992	0.0%	-2.8%	-3.3%	-6.8%	-8.8%	-8.3%
1993	-7.8%	-5.7%	-3.3%	-14.4%	-11.5%	-8.3%

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	1.150	0.775	0.494	0.818	0.573	0.389
1990	1.150	0.775	0.494	0.818	0.573	0.389
1991	1.150	0.765	0.486	0.818	0.566	0.384
1992	1.150	0.765	0.486	0.818	0.566	0.384
1993	1.108	0.754	0.486	0.791	0.560	0.384
<b>Change;</b>						
1989 – 1993	-3.6%	-2.7%	-1.6%	-3.2%	-2.3%	-1.3%

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	1.150	0.775	0.494	0.818	0.573	0.389
1990	1.091	0.735	0.468	0.776	0.543	0.369
1991	1.047	0.696	0.442	0.744	0.516	0.350
1992	1.017	0.676	0.430	0.723	0.501	0.340
1993	0.951	0.647	0.417	0.679	0.480	0.330
<b>Change;</b>						
1989 – 1993	-17.3%	-16.5%	-15.5%	-16.9%	-16.1%	-15.3%

## Appendix I

### Rate Comparisons And Trends

**San Diego MSA  
US West vs. AirTouch**

#### **Difference in Basic Rate (US West – AirTouch)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989	0.000	0.000	-0.040	0.056	0.038	0.025
1990	0.000	0.000	-0.040	0.056	0.038	0.025
1991	0.000	-0.018	-0.036	-0.001	-0.013	-0.023
1992	0.000	-0.018	-0.036	-0.001	-0.013	-0.023
1993	0.000	-0.018	-0.036	-0.003	-0.016	-0.025
<b>%</b>						
1989	0.0%	0.0%	-10.2%	7.6%	7.4%	7.2%
1990	0.0%	0.0%	-10.2%	7.6%	7.4%	7.2%
1991	0.0%	-2.8%	-9.1%	-0.1%	-2.9%	-7.5%
1992	0.0%	-2.8%	-9.1%	-0.1%	-2.9%	-7.5%
1993	0.0%	-2.8%	-9.1%	-0.5%	-3.5%	-8.4%

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	0.943	0.652	0.413	0.711	0.498	0.338
1990	0.943	0.652	0.413	0.711	0.498	0.338
1991	0.943	0.643	0.415	0.682	0.472	0.314
1992	0.943	0.643	0.415	0.682	0.472	0.314
1993	0.943	0.643	0.415	0.681	0.471	0.313
<b>Change;</b>						
1989 – 1993	0.0%	-1.4%	0.5%	-4.2%	-5.5%	-7.5%

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	0.943	0.652	0.413	0.711	0.498	0.338
1990	0.895	0.618	0.392	0.674	0.472	0.321
1991	0.859	0.585	0.378	0.621	0.430	0.286
1992	0.834	0.568	0.367	0.603	0.417	0.278
1993	0.810	0.552	0.356	0.584	0.404	0.268
<b>Change;</b>						
1989 – 1993	-14.2%	-15.4%	-13.8%	-17.8%	-18.9%	-20.6%

## Appendix I

### Rate Comparisons And Trends

**Sacramento MSA  
SCTC vs. SVLP**

#### **Difference in Basic Rate (SCTC – SVLP)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989	0.099	0.065	0.040	0.053	0.025	0.004
1990	0.099	0.065	0.040	0.053	0.025	0.004
1991	0.099	0.065	0.040	0.053	0.025	0.004
1992	0.099	0.065	0.040	0.053	0.025	0.004
1993	0.099	0.065	0.040	0.053	0.025	0.004
<b>%</b>						
1989	14.9%	14.1%	12.9%	10.8%	7.4%	1.9%
1990	14.9%	14.1%	12.9%	10.8%	7.4%	1.9%
1991	14.9%	14.1%	12.9%	10.8%	7.4%	1.9%
1992	14.9%	14.1%	12.9%	10.8%	7.4%	1.9%
1993	14.9%	14.1%	12.9%	10.8%	7.4%	1.9%

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	0.613	0.429	0.292	0.466	0.327	0.223
1990	0.613	0.429	0.292	0.466	0.327	0.223
1991	0.613	0.429	0.292	0.466	0.327	0.223
1992	0.613	0.429	0.292	0.466	0.327	0.223
1993	0.613	0.429	0.292	0.466	0.327	0.223
<b>Change;</b>						
1989 – 1993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	0.613	0.429	0.292	0.466	0.327	0.223
1990	0.581	0.407	0.277	0.443	0.310	0.211
1991	0.558	0.391	0.266	0.425	0.298	0.203
1992	0.542	0.380	0.258	0.412	0.289	0.197
1993	0.526	0.368	0.250	0.400	0.281	0.191
<b>Change;</b>						
1989 – 1993	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%



## Appendix I

### Rate Comparisons And Trends

**Fresno MSA  
FCTC vs. FMSA LP**

#### **Difference in Basic Rate (FCTC – FMSA LP)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989	0.007	0.008	0.005	-0.006	-0.006	-0.006
1990	0.007	0.008	0.005	-0.006	-0.006	-0.006
1991	0.007	0.008	0.005	-0.006	-0.006	-0.006
1992	0.007	0.008	0.005	-0.006	-0.006	-0.006
1993	0.067	0.038	0.015	0.054	0.024	0.004
<b>%</b>						
1989	0.8%	1.4%	1.3%	-0.9%	-1.3%	-2.0%
1990	0.8%	1.4%	1.3%	-0.9%	-1.3%	-2.0%
1991	0.8%	1.4%	1.3%	-0.9%	-1.3%	-2.0%
1992	0.8%	1.4%	1.3%	-0.9%	-1.3%	-2.0%
1993	8.0%	6.6%	3.9%	8.3%	5.3%	1.3%

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	0.833	0.574	0.383	0.657	0.457	0.307
1990	0.833	0.574	0.383	0.657	0.457	0.307
1991	0.833	0.574	0.383	0.657	0.457	0.307
1992	0.833	0.574	0.383	0.657	0.457	0.307
1993	0.804	0.559	0.377	0.627	0.442	0.302
<b>Change;</b>						
1989 – 1993	-3.6%	-2.6%	-1.3%	-4.6%	-3.3%	-1.6%

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	0.833	0.574	0.383	0.657	0.457	0.307
1990	0.791	0.545	0.363	0.623	0.434	0.291
1991	0.759	0.523	0.348	0.598	0.416	0.280
1992	0.737	0.507	0.338	0.581	0.404	0.271
1993	0.690	0.480	0.324	0.538	0.379	0.259
<b>Change;</b>						
1989 – 1993	-17.3%	-16.4%	-15.3%	-18.1%	-17.0%	-15.6%

## Appendix I

### Rate Comparisons And Trends

**Santa Barbara MSA  
SBCS vs. GTE LP**

#### **Difference in Basic Rate (SBCS – GTE LP)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989	0.000	-0.005	0.004	0.026	0.012	0.002
1990	0.000	-0.005	0.004	0.026	0.012	0.002
1991	0.000	-0.005	0.004	0.026	0.012	0.002
1992	0.000	-0.005	0.004	0.026	0.012	0.002
1993	0.000	-0.005	0.004	0.026	0.012	0.002
<b>%</b>						
1989	0.0%	-0.6%	0.8%	3.1%	2.1%	0.5%
1990	0.0%	-0.6%	0.8%	3.1%	2.1%	0.5%
1991	0.0%	-0.6%	0.8%	3.1%	2.1%	0.5%
1992	0.0%	-0.6%	0.8%	3.1%	2.1%	0.5%
1993	0.0%	-0.6%	0.8%	3.1%	2.1%	0.5%

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	1.150	0.778	0.492	0.823	0.576	0.391
1990	1.150	0.778	0.492	0.823	0.576	0.391
1991	1.150	0.778	0.492	0.823	0.576	0.391
1992	1.150	0.778	0.492	0.823	0.576	0.391
1993	1.150	0.778	0.492	0.823	0.576	0.391
<b>Change;</b>						
1989 – 1993	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989	1.150	0.778	0.492	0.823	0.576	0.391
1990	1.091	0.738	0.467	0.781	0.546	0.371
1991	1.047	0.708	0.448	0.749	0.524	0.356
1992	1.017	0.687	0.435	0.728	0.509	0.346
1993	0.987	0.667	0.422	0.706	0.494	0.336
<b>Change;</b>						
1989 – 1993	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%

## Appendix I

### Rate Comparisons And Trends

**RSA 2**

**Cal. RSA #2 vs. Modoc RSA LP**

#### **Difference in Basic Rate (Cal. RSA #2 – Modoc RSA LP)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989						
1990						
1991						
1992 *						
1993	-0.020	-0.020	-0.020			
<b>%</b>						
1989						
1990						
1991						
1992						
1993	-2.5%	-3.6%	-5.4%			

\* Note: Rates not submitted by Cal. RSA #2 for years prior to 1993

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989						
1990	0.830	0.580	0.393	0.654	0.463	0.319
1991	0.830	0.580	0.393	0.654	0.463	0.319
1992	0.830	0.580	0.393	0.654	0.463	0.319
1993	0.820	0.570	0.383	0.654	0.463	0.319
<b>Change;</b>						
1990 – 1993	-1.2%	-1.7%	-2.5%	0.0%	0.0%	0.0%

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>MOU / mo.</b>						
1989						
1990	0.787	0.550	0.372	0.620	0.439	0.303
1991	0.756	0.528	0.357	0.595	0.421	0.291
1992	0.734	0.513	0.347	0.578	0.409	0.282
1993	0.704	0.489	0.328	0.561	0.397	0.274
<b>Change;</b>						
1990 – 1993	-10.6%	-11.1%	-11.8%	-9.5%	-9.5%	-9.5%

## Appendix I

### Rate Comparisons And Trends

**RSA 7**

**Century EC vs. Contel Cell.**

#### **Difference in Basic Rate (Century EC – Contel Cell.)**

	Retail			Wholesale		
	60	120	480	60	120	480
<b>\$/MOU</b>						
1989						
1990						
1991	0.083	0.042	0.013	0.060	0.040	0.020
1992	0.083	0.042	0.013	0.060	0.040	0.020
1993	0.083	0.042	0.013	0.060	0.040	0.020
<b>%</b>						
1989						
1990						
1991	8.8%	6.4%	3.0%	8.8%	8.3%	6.1%
1992	8.8%	6.4%	3.0%	8.8%	8.3%	6.1%
1993	8.8%	6.4%	3.0%	8.8%	8.3%	6.1%

#### **Average Basic Rate in Nominal \$ / MOU**

	Retail			Wholesale		
MOU / mo.	60	120	480	60	120	480
1989	0.860	0.610	0.420	0.620	0.440	0.310
1990	0.860	0.610	0.420	0.620	0.440	0.310
1991 *	0.902	0.631	0.426	0.650	0.460	0.320
1992	0.902	0.631	0.426	0.650	0.460	0.320
1993	0.902	0.631	0.426	0.650	0.460	0.320
Change;						
1989 – 1993	4.8%	3.4%	1.5%	4.8%	4.5%	3.2%

\* Note: Century El Centro was not in operation prior to 1991

#### **Average Basic Rate in Real \$ / MOU**

	Retail			Wholesale		
MOU / mo.	60	120	480	60	120	480
1989	0.860	0.610	0.420	0.620	0.440	0.310
1990	0.816	0.579	0.398	0.588	0.417	0.294
1991	0.821	0.574	0.388	0.592	0.419	0.291
1992	0.797	0.558	0.377	0.575	0.407	0.283
1993	0.774	0.541	0.366	0.558	0.395	0.275
Change;						
1989 – 1993	-10.0%	-11.2%	-12.9%	-10.0%	-10.3%	-11.4%

Revised Sept. 13, 1994

## **Appendix J**

### **Rate Plan and Customer Data**

Redacted

## Appendix J

### Rate Plan and Customer Data

#### Los Angeles MSA

#### Los Angeles Cellular Telephone Company

	Tot. No. Customers		Total	Growth Rate			
	Retail	Wholesale		Retail	Wholesale		
1989							
1990							
1991							
1992							
1993							
Basic	Number of Customers			Percentage of			
	Retail	Wholesale		Total Customers			
1989							
1990							
1991							
1992							
1993							
Free Min. Rates	0 Termina. Fee		\$0.00				
	Retail			Wholesale			
	Peak	Off-Peak	Access	Peak	Off-Peak	Access	
	\$0.450	\$0.270	\$45.00	\$0.370	\$0.220	\$34.41	
\$/MOU	60	120	480	60	120	480	
	1989	1.164	0.789	0.508	0.914	0.627	0.412
	1990	1.164	0.789	0.508	0.914	0.627	0.412
	1991	1.164	0.789	0.508	0.914	0.627	0.412
	1992	1.164	0.789	0.508	0.914	0.627	0.412
	1993	1.164	0.789	0.508	0.914	0.627	0.412

#### NiteOwl / Plan2

		Number of Customers		Percentage of		
		Retail	Wholesale	Total Customers		
1989						
1990						
1991						
1992						
1993						
Free Min.		0 Termina. Fee		\$0.00		
Rates		Retail		Wholesale		
		Peak	Off-Peak	Access	Peak	Off-Peak
		\$0.900	\$0.200	\$25.00	\$0.720	\$0.160
						Access
						\$17.00
	prior					
		60	120	480	60	120
						480
\$/MOU	1989	1.177	0.968	0.812	0.891	0.750
	1990	1.177	0.968	0.812	0.891	0.750
	1991	1.177	0.968	0.812	0.891	0.750
	1992	1.177	0.968	0.812	0.891	0.750
	1993	1.177	0.968	0.812	0.891	0.750
						0.643
						0.643
						0.643
						0.643
						0.643

Redacted

## Appendix J

### Rate Plan and Customer Data

#### Los Angeles MSA

#### Los Angeles Cellular Telephone Company

#### Premium Value Plan

	Number of Customers		Percentage of			
	Retail	Wholesale	Total Customers			
1989						
1990						
1991						
1992						
1993						
Free Min. Rates	600 Termina. Fee		\$0.00			
	Retail			Wholesale		
	Peak	Off-Peak	Access	Peak	Off-Peak	Access
	\$0.370	\$0.210	\$239.99	\$0.300	\$0.170	\$190.92
\$/MOU	60	120	480	60	120	480
1989						
1990	4.000	2.000	0.500	3.182	1.591	0.398
1991	4.000	2.000	0.500	3.182	1.591	0.398
1992	4.000	2.000	0.500	3.182	1.591	0.398
1993	4.000	2.000	0.500	3.182	1.591	0.398

#### High Value

	Number of Customers		Percentage of			
	Retail	Wholesale	Total Customers			
1992						
1993						
Free Min. Rates	475 Termina. Fee		\$175.00			
	Retail			Wholesale		
	Peak	Off-Peak	Access	Peak	Off-Peak	Access
	\$0.380	\$0.210	\$199.99	\$0.310	\$0.170	\$158.37
\$/MOU	60	120	480	60	120	480
1992						
1993	3.333	1.667	0.420	2.640	1.320	0.333

Redacted

## Appendix J

### Rate Plan and Customer Data

#### Los Angeles MSA

#### Los Angeles Cellular Telephone Company

##### Standard Value Plan

1 yr contract	Number of Customers		Percentage of			
	Retail	Wholesale	Total Customers			
	1992					
	1993					
Free Min. Rates	170	Termina. Fee	\$150.00			
	Retail			Wholesale		
	Peak	Off-Peak	Access	Peak	Off-Peak	Access
	\$0.390	\$0.230	\$99.99	\$0.320	\$0.190	\$77.00
\$/MOU	60	120	480	60	120	480
1992						
1993	1.667	0.833	0.440	1.283	0.642	0.350

##### Convenience Val.

1 yr contract	Number of Customers		Percentage of			
	Retail	Wholesale	Total Customers			
	1992					
	1993					
Free Min. Rates	80	Termina. Fee	\$100.00			
	Retail			Wholesale		
	Peak	Off-Peak	Access	Peak	Off-Peak	Access
	\$0.410	\$0.240	\$69.99	\$0.330	\$0.200	\$52.59
\$/MOU	60	120	480	60	120	480
1992						
1993	1.167	0.709	0.459	0.877	0.540	0.363

##### Advantage Value

1 yr contract	Number of Customers		Percentage of			
	Retail	Wholesale	Total Customers			
	1992					
	1993					
Free Min. Rates	320	Termina. Fee	\$175.00			
	Retail			Wholesale		
	Peak	Off-Peak	Access	Peak	Off-Peak	Access
	\$0.380	\$0.220	\$149.99	\$0.310	\$0.180	\$117.69
\$/MOU	60	120	480	60	120	480
1992						
1993	2.500	1.250	0.428	1.962	0.981	0.340



## Rate Plan and Customer Data

## Los Angeles MSA

## Los Angeles SMSA LP

	Tot. No. Customers		Total	Growth Rate	
	Retail	Wholesale		Retail	Wholesale
1989					
1990					
1991					
1992					
1993					

## Basic

	Number of Customers		Percentage of Total Customers
	Retail	Wholesale	
1989			
1990			
1991			
1992			
1993			

Free Min. Rates	0 Termina. Fee		\$0.00			
	Retail	Wholesale	Access	Peak	Off-Peak	Access
	Peak \$0.450	Off-Peak \$0.270	\$45.00	\$0.366	\$0.220	\$34.41
\$/MOU	60	120	480	60	120	480
1989	1.164	0.789	0.508	0.910	0.624	0.408
1990	1.164	0.789	0.508	0.910	0.624	0.408
1991	1.164	0.789	0.508	0.910	0.624	0.408
1992	1.164	0.789	0.508	0.910	0.624	0.408
1993	1.164	0.789	0.508	0.910	0.624	0.408

## Personal Communications Plan

	Number of Customers		Percentage of Total Customers
	Retail	Wholesale	
1989			
1990			
1991			
1992			
1993			

Free Min. Rates	Termina. Fee		\$0.00			
	Retail	Wholesale	Access	Peak	Off-Peak	Access
	Peak \$0.900	Off-Peak \$0.200	\$25.00	\$0.720	\$0.160	\$17.00
\$/MOU	60	120	480	60	120	480
1989	1.177	0.968	0.812	0.891	0.750	0.643
1990	1.177	0.968	0.812	0.891	0.750	0.643
1991	1.177	0.968	0.812	0.891	0.750	0.643
1992	1.177	0.968	0.812	0.891	0.750	0.643
1993	1.177	0.968	0.812	0.891	0.750	0.643